From:	Robert.Neely
Reply To:	Robert.Neely@noaa.gov
To:	Chip Humphrey/R10/USEPA/US@EPA; Eric Blischke/R10/USEPA/US@EPA; Burt Shephard/R10/USEPA/US@EPA
Subject:	[Fwd: Re: Water eco screnning level values]
Date:	07/07/2006 03:58 PM
Attachments:	Robert.Neely.vcf

Hey Gents -- FYI. This is just a preliminary, rough assessment from Buchman re: water SLs. I expect I'll get a more detailed set of comments out of him week-after next. Note, however, he found several errors in the first page of the table alone, so he suggests a value-by-value review might be a prudent step. He also points out some general issues with the decision framework (see first 2-3 paragraphs). Are you still interested in receiving comments on the framework even though it has more-or-less been put to bed?

I'm outta here. Talk to y'all week after next.

-R

-------- Original Message --------
Subject: Re: Water eco screnning level values
Date: Fri, 07 Jul 2006 15:12:22 -0700
From: Mike Buchman <Mike.Buchman@noaa.gov>
To: Robert.Neely@noaa.gov
References: <44AD996A.405@noaa.gov>

Rob,
I don't have the site history to generate comments as detailed as DEQ's (and I can't quite follow some of theirs too because of that factor). My overall reaction though is that the most important aspect of this is the decision framework - how these will be applied and the corresponding results interpreted. And there I find some weaknesses. There is no discussion whatsoever as to how acute versus chronic values will be applied. From my perspective, only chronic values should be used, and if there is no chronic value, then an acute value/10 should be used. Anything else would not truly be "conservative." In Section 4.0, there seems to be the possible start of some weasel language to explain away "hits."

For instance, it states, "For example, exceedance of an SL for a transition zone water sample might mean there will be a potential adverse effect on infaunal benthic invertebrates. This line of evidence will be weighted against results from bioassay tests..., measured chemical concentrations in the sediment compared to sediment guidelines, and invertebrate tissue concentrations compared to TRVs" While at face value this seems straightforward, what if there are no sed guidelines or tissue ?TRVs? What about VOCs which are not expected to adhere to seds nor bioaccumulate in tissue? Would negative (or missing) indications in one or two of the other legs of the stool mean chemicals or sites would not be carried forward regardless?

Section 4 continues on with discussion over "the intent of values used for SLs" and how species represented may not be present or relevant to the Willamette. This is just another opening to explain away failing the screen.

Section 4 also states, "if an exceedance of AWQC is noted, a search for species specific water quality values will be initiated. The location of exceedances will also be considered including the suitability of the sample location as habitat for potentially impacted organisms." Relative to AWQC, this simply is NOT appropriate. This is the basis for promulgated state standards! There is no wiggle room for whether a sample location represents habitat. The follow-up would be either the Water-Effect Ratio Procedure and possibly a Recalculation Procedure (since salmonids are typically among the most sensitive species, I doubt this procedure holds much promise for them anyway). But either of these should not be a part of the initial screening, but rather occur in a subsequent phase.

They fail to mention whether dissolved or total metals will be used.

There is an entire set of AWQC that are problematic - the semivolatile organochlorines. The acute values should have been halved and are not, and they selected a less conservative Tier II value over the AWQC.

I haven't had the chance to delve into the exact figures as yet, but I did spot at least three errors on just the first page! The point being, they should get a value-by-value review. It doesn't seem like DEQ got to that either.

Mike

Robert.Neely wrote:
> Mike,
>
> I'm attaching three files.
>
> 1) A draft tech memo from the Lower Willamette Group (April 2005) that
> describes their process heirarchy for selecting acute and chronic
> water screening levels
> (SLs) for use in preliminary ecological evaluation of Round 2 data
> relating to surface water, groundwater, and transition zone water (in
> the biologically active zone, 0-1 ft) from Portland Harbor.

>
> 2) A revised table of LWG-proposed SLVs (May 2006)
>
> 3) DEQ's comments on the revised SLV table. (DEQ looked at the extent
> to which LWG followed their own process for selecting SLVs and and
> provided comments they may be of interest to you in your review.)
>
> I'm not hoping for a completely exhaustive review of these values, but
> I am interested to hear if you see any major flags, especially if they
> haven't already been raised by DEQ. I think we have 2-3 weeks to
> provide comments, so it's not essential to get through this before
> science camp. I will be in the office all day toorrow, so feel free to
> give me a call. I'm out next week, back on the 17th.
>
> Thanks for your help.
>
> -R